

WHAT IS CLAIMED IS:

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1. An inkjet printing apparatus which moves a media sheet along a media path and marks the media sheet with ink, comprising:
5 an inkjet printhead having a plurality of inkjet nozzles which eject ink onto a portion of the media sheet located within a print zone, the print zone located adjacent to the plurality of nozzles;
10 a support which supports the media sheet as the media sheet passes along the media path through the print zone;
15 a roller located upstream along the media path prior to the print zone, the roller stabilizing the media sheet relative to a first surface during printing onto at least a first portion of the media sheet;
a guide shim located along the media path, the guide shim having a guide surface extending at least from the roller, beyond the roller toward the print zone during printing, the guide shim acting upon a portion of the media sheet between the 20 roller and the print zone to keep the media sheet out of contact with the printhead; and
means for advancing the guide shim along the media path into the print zone during printing to at least a third portion of the media sheet.

2. The apparatus of claim 1, in which the advancing means
25 comprises means for advancing the guide shim into the print zone while a trailing edge of the media sheet moves into the print zone.

3. The inkjet printing apparatus of claim 1, in which the roller is a first roller and further comprising a second roller located downstream along the media path after the print zone, the second roller stabilizing the media sheet relative to a second surface during printing onto at least a second portion of the media sheet.

4. The inkjet printing apparatus of claim 6, in which the support is an endless belt, and wherein the endless belt comprises an outer surface upon which the media sheet rests, the outer surface being said first surface and said second surface.

30 5. The inkjet apparatus of claim 6, in which the support moves along a path between the first roller and second roller while supporting a trailing portion of the media sheet.

6. The inkjet apparatus of claim 1, further comprising:
a sensor which detects position of the media sheet and generates in
response a sensor signal; and
means responsive to the sensor signal for activating the advancing
means to move the guide shim along the media path.

7. The inkjet apparatus of claim 1, in which the inkjet printhead is a
pagewide array printhead.

8. The inkjet apparatus of claim 1, in which the inkjet printhead is a
scanning type printhead which scans across the media sheet in a direction orthogonal to
the direction of media sheet movement along the media path.

9. The inkjet apparatus of claim 1, in which the plurality of inkjet
nozzles are organized into a plurality of rows, each row extending in a direction
orthogonal to the direction of media sheet movement along the media path.

10. A method for advancing a media sheet along a media path
through a print zone of an inkjet printing apparatus, the apparatus including an inkjet
printhead having a plurality of inkjet nozzles which eject ink, the print zone located
adjacent to the plurality of nozzles, the method comprising the steps of:

receiving the media sheet at a roller which stabilizes the media sheet
along the media path relative to a first surface, the roller located upstream along the
media path prior to the print zone;

moving the media sheet under a guide shim toward the print zone, the
guide shim acting upon a portion of the media sheet to maintain flatness and advance
accuracy of the media sheet as a trailing edge of the media sheet travels beyond the
roller toward the print zone;

ejecting ink onto a portion of the media sheet located within the print
zone; and

advancing the guide shim along the media path into the print zone while
a trailing portion of the media sheet moves into the print zone.

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Substantially identical to
11. The method of claim 10, in which the roller is a first roller and further comprising the step of receiving the media sheet at a second roller which stabilizes the media sheet along the media path relative to a second surface, the second roller located downstream along the media path after the print zone.

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12. The method of claim 11, in which the inkjet printing apparatus includes an endless belt which supports the media sheet as the media sheet passes along the media path through the print zone, wherein the step of receiving the media sheet at the first roller comprises pressing the media sheet to the endless belt, wherein the step of receiving the media sheet at the second roller comprises pressing the media sheet to the endless belt, the endless belt comprising the first surface and the second surface.

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13. The method of claim 11, in which the inkjet printing apparatus includes an endless belt which supports the media sheet as the media sheet passes along the media path through the print zone, and wherein the step of moving the media sheet under a guide shim toward the print zone comprises the step of driving the endless belt to carry the media sheet under the guide shim toward the print zone.

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14. The method of claim 10, further comprising the step of detecting a trailing edge of the media sheet, and in which the step of advancing comprises advancing the guide shim along the media path in response to the detection of the trailing edge.

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15. The method of claim 10, further comprising the steps of:
moving the media sheet onto a support; and
moving the support along a path away from the roller while supporting a trailing portion of the media sheet during printing to at least a portion of the media sheet.

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16. The method of claim 15, in which the roller is a first roller and in which the step of moving the support comprises moving the support along a path between the first roller and a second roller while supporting a trailing portion of the media sheet during printing to at least a portion of the media sheet, the second roller located downstream along the media path after the print zone.